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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/896,321

06/29/2001

Preston J. Hunt

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05/16/2006

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EXAMINER

POLTORAK, PIOTR

ART UNIT

PAPER NUMBER

2134

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/896,321	HUNT ET AL.	
	Examiner	Art Unit	
	Peter Poltorak	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 7, 10-12, 20-23, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 10-12, 20-23, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment, and remarks therein, received on 2/17/06 have been entered and carefully considered. The newly introduced limitation has required a new search and consideration of the pending claims. The new search has resulted in newly discovered prior art. New grounds of rejection based on the newly discovered prior art follow below.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

3. Applicant's arguments have been directed towards a newly introduced limitations introduced to the independent claims 1, 10, 20. The newly recited limitations are addressed in the current Office Action.
4. Claims 1-4, 6-7, 10-12, 20-23 and 25-26 have been examined.

Claim Rejections - 35 USC § 112

5. Claims 1-4, 6-7, 10-12, 20-23 and 25-26 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.
6. The limitations in the independent claims 1, 10 and 20 recite: "combining the first plurality of message digest into a single client message digest" and "combining the second plurality of message digest into a single repository digest" are not clear. It is

not clear whether the single digest is a digest of the client digests or whether the single client digest is just a single file message.

7. Given the fact that placing the numerous digest at the same time to a single file to be compared with the synchronized copies in a repository would be at least obvious and the fact that applicant's specification seems to suggest that the single client digest is a digest of digest ("a similar message digest calculated from the database of message digests on the repository", paragraph 34) this interpretation is used in addressing the claim limitations.
8. Claims 2-4, 6-7, 11-12, 21-23 and 25-26 are rejected by virtue of their dependence.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

9. Claims 1-4, 6-7, 10-12, 20-23 and 25-26 are newly rejected under 35 U.S.C. 103(a) as obvious over Margolus (U.S. Pub. No. 20040143743) in view of Chan (U.S. Patent No. 6748538) and Bolosky (U.S. Pub. No. 20020194484).

As per claims 1-4, 6-7, 10-12, 20-23 and 25-26 Margolus teaches a method comprising generating a first plurality of message digests that correspond to a first plurality of file contents (digital fingerprints of data items on a client [10-11]) on a client connected with a network (clients connected with a repository [11], Fig. 1), wherein the first plurality of message digests uniquely identify the first plurality of file contents (each fingerprint uniquely identifies each files [10]), generating a second

plurality of message digests (the repository keeps copy of some of the client's fingerprints [10]) that correspond to a second plurality of file contents on a repository (if no corresponding fingerprint kept on the client is found in the repository, the corresponding file is copied to the repository [10]) connected with the network ([11], Fig. 1), wherein the second plurality of message digests uniquely identify the second plurality of file contents (as disclosed above). Furthermore, Margolus teaches the cryptographic hash comprising 128-160 bits (SHA-1 [59]), a back up of the local file system from [54] and disclose that the local data digests are first used to check whether or not the repository already contains a copy of the local data digests. Margolus also teach that the first plurality of file contents comprises a subset of files stored on the client [59].

10. Margolus does not teach combining the first plurality of message digests into a single client message digest and combining the second plurality of message digest into a single repository message digest followed by comparing the single client message digest with the single repository message digest to determine file contents that do not match.

Chan teaches combining the first plurality of message digest into a single client message digest (col. 3 line 45- col. 4 line 7) and Bolosky provides the motivation to combine.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the first plurality of message digest into a single client message digest given and to combine the second plurality of message digest into a single

repository message digest followed by comparing the single client message digest with the single repository message digest to determine file contents that do not match given the benefit of performing fewer computations.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Chauhan (U.S. 6330557).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-


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3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


5/11/6


JACQUES LOUIS JACQUES
PRIMARY EXAMINER